

WHAT IS CLAIMED IS:

1. A method of preconditioning an anion exchange resin, comprising:
providing an anion exchange resin bed and passing carbon dioxide gas through the resin bed.

2. The method of Claim 1, wherein the anion exchange resin is a DOW® 550 anion exchange resin.

3. The method of Claim 1, further comprising prior to passing said carbon dioxide gas through said anionic exchange resin, purifying the carbon dioxide gas.

4. The method of Claim 3, wherein the carbon dioxide gas is purified in an ionic purifier in which the carbon dioxide gas is brought into countercurrent contact in a column with a liquid comprising high-purity water, thereby forming a purified carbon dioxide gas which is removed from the ionic purifier.

5. The method of Claim 4, wherein packing material is disposed inside the column.

6. The method of Claim 5, wherein the carbon dioxide gas is introduced into the column at a point below the packing material.

7. The method of Claim 5, wherein the liquid is continuously introduced into the column at a point above the packing material, and the carbon dioxide gas is continuously introduced into the column.

8. The method of Claim 1, wherein the preconditioning is performed in situ in an anion exchange column containing the anion exchange resin bed.

9. The method of Claim 8, wherein the column further contains high purity water through which the carbon dioxide gas is bubbled.

10. The method of Claim 8, wherein the carbon dioxide gas is introduced into a bottom portion of the column and is removed from a top portion thereof.

11. The method of Claim 1, wherein the anion exchange resin is converted to bicarbonate (HCO_3) form.

12. The method of Claim 11, wherein the carbon dioxide gas is passed through the anion exchange resin for a period of from about 7 to 10 hours.

13. The method of Claim 1, further comprising contacting the anion exchange resin with deionized water after passing the carbon dioxide gas through the resin.

14. The method of Claim 13, wherein the carbon dioxide is passed through the resin bed at about atmospheric pressure.

15. A resin preconditioned by the method of Claim 1.

16. The resin of Claim 15, wherein the resin is in bicarbonate (HCO_3) form.

17. The resin of Claim 15, wherein the resin is DOWEX®550A (OH).
18. A method of purifying a hydrogen peroxide solution, comprising:
passing said hydrogen peroxide solution through a column containing an anionic exchange resin bed, wherein said resin bed has been preconditioned by a method according to Claim 1.
19. The method of Claim 18, wherein the hydrogen peroxide solution has a hydrogen peroxide concentration of 50 weight percent or less.
20. The method according to Claim 18, wherein the resin is a DOW 550® anionic exchange resin.
21. The method according to Claim 18, wherein the hydrogen peroxide solution is passed through the column in an upflow mode.
22. The method according to Claim 18, further comprising passing the hydrogen peroxide solution through a second column ion exchange column in series with the first column.
23. The method according to Claim 22, wherein said second column contains a cation exchange resin.
24. The method according to Claim 22, further comprising passing the hydrogen peroxide solution through a third column for removing total organic

carbon impurities in said hydrogen peroxide solution, wherein the said third column is connected in series with and upstream of the first and second columns.

25. The method according to Claim 18, wherein ionic impurities are removed from a hydrogen peroxide solution.